

## Regional Precipitation Graphics

### Part I - Mission Connection

- a. Product Description - The NWS collects rainfall data to support forecast and warning operations. RFCs and WFOs in Southern Region provide rainfall collectives in text format and graphical format for their areas of responsibility. The experimental Regional Precipitation Graphics are Internet web pages that show these precipitation data in graphical form. These graphic products are for the entire Southern Region (SR) area, the area of responsibility of each SR River Forecast Center (RFC), and each state in SR. Precipitation graphics for north, south, and west Texas are available.

This suite of products includes precipitation for the last day, last 7-days, last 14-days, month-to-date, and year-to-date. Monthly and yearly archives will be maintained. Except for the 1-day duration, graphics of the normal precipitation, percent of normal precipitation, and departure from normal and a 4-panel summary will be generated. Note that other durations may be made available in the future

- b. Purpose - Quantitative Precipitation Estimates (QPE) Graphics are graphical representations of rainfall that has occurred for a specific length of time. Currently, each office prepares its QPE graphics using different colors, precipitation thresholds, and geographic projections. By centralizing the production of these graphics, these products will make it easier for the public to compare data across the entire Southern Region.

Parameter-Elevation Regressions on Independent Slopes Model (PRISM) climate data from a cooperative venture between Oregon State University and the United States Department of Agriculture-Natural Resources Conservation Service (NRCS) provides a gridded field of normal precipitation. PRISM data usage is described in a 2000 SR Tech Attachment at [www.srh.noaa.gov/ftproot/topics/attach/html/hsd00-01.htm](http://www.srh.noaa.gov/ftproot/topics/attach/html/hsd00-01.htm). The regional graphics will help standardize the presentation of these analysis graphics.

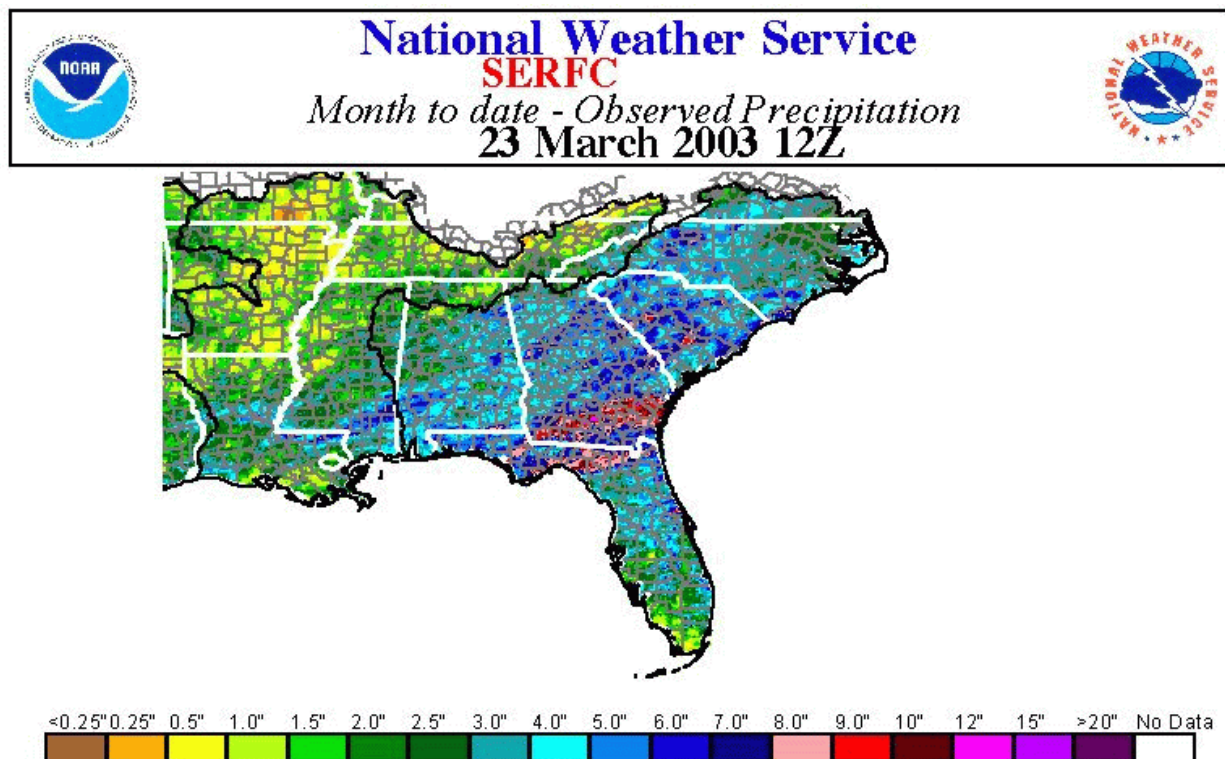
- c. Audience - The target audience for these graphics products is wide ranging. Regional customers and partners such as the Army Corps of Engineers (COE), the US Geological Survey (USGS), Federal Emergency Management Agency (FEMA), state EMs, and river authorities have areas of responsibility that span states and often River Forecast Centers (RFCs). For these offices to view precipitation over a large area, they must visit several websites. Water resources managers and climatologists can use the departures/per cent of normal information for drought monitoring and climatological applications. These new products cover large areas and these partners can easily see the precipitation values over a large area. Local Emergency Managers (EM) and the general public may also use this product.
- d. Presentation Format - The Precipitation Graphics are web-based graphics. Due to the gridded nature of data, no text presentations are made.
- e. Feedback Method - We are always seeking to improve our services based on user feedback. Comments regarding the regional Precipitation Graphics should be sent to the feedback email address on the webpage containing the product. Comments may also be provided to:

Lower Mississippi River Forecast Center  
62300 Airport Road  
Slidell, LA 70460  
Attn: Dave Reed  
[dave.reed@noaa.gov](mailto:dave.reed@noaa.gov)

Experimental Feedback Period: April 7 through October 1, 2003.

## Part II - Technical Description

- a. Format and Science Basis - Rainfall data are collected from cooperative observers and data collection networks such as GOES Data Collection Platforms (DCPs) and Automated Surface Observing Systems (ASOS). ArcView Geographic Information System (GIS) software is used to prepare a region-wide graphic of precipitation for all of SR. Precipitation graphics will also be prepared for an RFC. Graphics for each state will also be developed for users in need of more detail. Using standard Hypertext Markup Language (HTML), web browsers are then used to display these graphics. A sample of this product is shown in Figure 1.



**Figure 1** Graphic of Month-to-date precipitation

- b. Product Availability - The Precipitation Graphics are routinely issued twice daily. At 1630Z (1030AM CST), a preliminary graphic is prepared and sent to the web. At 0030Z (630PM), the final set of graphics are generated and sent to the Internet.
- c. Additional Information - Contact your nearest RFC.